

Orange County Natural Areas Inventory

MCGOWAN CREEK PRESERVE AND FLOODPLAIN

New Site 2004

Site Number: E02

Size: 102 acres

Site Significance: County

USGS Quadrangle: Efland

SIGNIFICANT FEATURES: This predominantly county-owned site provides a continuous forest connection with that of Eno River Duke Forest Mesic Slopes (E03) and other Duke Forest lands to the southeast. It provides habitat for turkey, deer, and other upland game animals, as well as providing them with forested corridors along the Eno River and across US 70. It provides habitat for neotropical migrant birds.

NATURAL COMMUNITIES: Mesic Mixed Hardwood Forest

GENERAL DESCRIPTION: The site occupies gentle slopes south of McGowan Creek at its confluence with the Eno River. A smaller, intermittent creek splits the site in two. Formerly, most of this site was a loblolly pine (*Pinus taeda*) plantation. Over the past couple of decades, natural regeneration of hardwoods has occurred and they will eventually replace the pines. They include yellow poplar (*Liriodendron tulipifera*), sweetgum (*Liquidambar styraciflua*), beech (*Fagus grandifolia*), and mockernut hickory (*Carya alba*), with occasional northern red oak (*Quercus rubra*) and white oak (*Q. alba*). Understory trees include red maple (*Acer rubrum*), redbud (*Cercis canadensis*), and ironwood (*Carpinus carolinianus*).

Disturbance from prior logging and thinning has allowed abundant growth of Japanese browntop grass (*Microstegium vimineum*) to occupy lowlands and even some of the uplands. This alien weed has the ability to suppress native herbaceous species and should be controlled. However, despite this threat, there are encouraging signs of natural herbaceous growth. Species such as bottlebrush grass (*Elymus hystrix* = *Hystrix patula*), black cohosh (*Cimicifuga racemosa*), hound's tongue (*Cynoglossum virginianum*), and showy orchis (*Galearis spectabilis*) indicate the presence of nutrient-rich, basic soil. These and other species requiring such soils will increase in the future as the hardwoods mature.

MANAGEMENT AND PROTECTION: Most of the site is owned by Orange County and managed as a wildlife preserve. Japanese browntop grass needs to be controlled if possible, as does Brazilian waterweed (*Egeria densa*), an aggressive alien aquatic weed, in McGowan Creek.

OWNERSHIP: Orange County, Orange-Alamance Water System, Private

REFERENCES: None